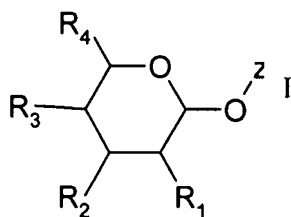


AMENDMENTS TO THE CLAIMS:

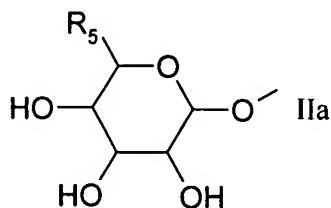
This listing of claims will replace all prior versions, and listings, of claims in the application:

1-76 (cancelled).

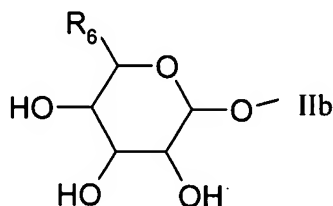
77 (currently amended). A method of treatment of a condition associated with raised activity of the enzyme Core 2 GlcNAc-T comprising administration of an effective amount of a compound of the formula I to a patient in need thereof;



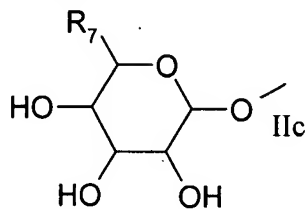
wherein R_1 is $-OH$, C_{1-6} alkoxy, $-NR_8R_9$, or a monosaccharide of the formula IIa;



R_2 is $-OH$, C_{1-6} alkoxy or a monosaccharide of the formula IIb:



R₃ is -OH, C₁₋₆ alkoxy or a monosaccharide of the formula IIc:



R₄ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl;

R₅ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl;

R₆ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl;

R₇ is C₂₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl;

R₈ is H, C₁₋₆ alkyl or C₁₋₆ acyl;

R₉ is H, C₁₋₆ alkyl or C₁₋₆ acyl; and

Z is a steroid group;

or a pharmaceutically acceptable salt, ester or tautomeric form or derivative thereof,

wherein the said condition associated with raised activity of the enzyme Core 2 GlcNAc-T is selected from the group consisting of an inflammatory disease, asthma, rheumatoid arthritis, atherosclerosis, inflammatory bowel disease, diabetic cardiomyopathy, myocardial dysfunction, cancer, cancer metastasis or diabetic retinopathy and

wherein the cancer to be treated is selected from the group consisting of leukaemia, oral cavity carcinomas, pulmonary cancers such as pulmonary adenocarcinoma, colorectal cancer, bladder carcinoma, liver tumours, stomach tumours colon tumours, prostate cancer, testicular tumour, mammary cancer, lung tumours oral cavity carcinomas and any cancers where Core 2 GlcNAc-T expression is raised above

normal levels for that tissue type.

78 (previously presented). A method of treatment as described in claim 77 in which R₁ is a monosaccharide of the formula IIa.

79 (previously presented). A method of treatment as described in claim 78 in which R₅ is C₁₋₆ alkyl or C₁₋₆ hydroxyalkyl.

80 (previously presented). A method of treatment as described in claim 78 in which R₅ is -CH₃, -C₂H₅, -CH₂OH or -C₂H₄OH.

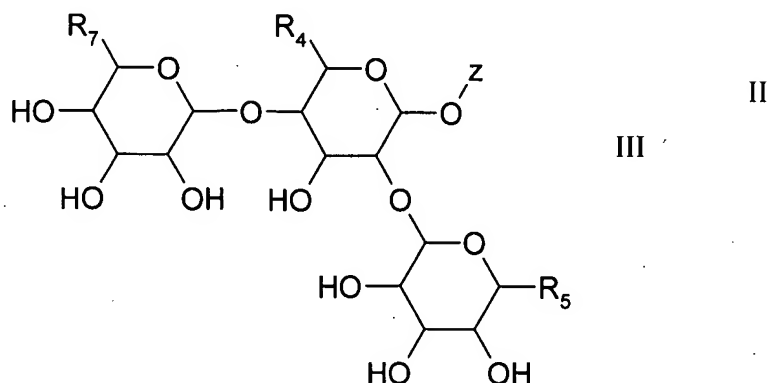
81 (previously presented). A method of treatment as described in claim 77 in which R₃ is a monosaccharide of the formula IIc.

82 (previously presented). A method of treatment as described in claim 81 in which R₇ is C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl.

83 (previously presented). A method of treatment as described in claim 81 in which R₇ is -CH₂OH or C₁₋₆ alkoxyethyl.

84 (previously presented). A method of treatment as described in claim 81 in which R₇ is -CH₂OH.

85 (previously presented). A method of treatment as described in claim 77 in which the compound of the formula I is a compound of the formula III:



wherein:

R₄ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl;

R₅ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl; and

R₇ is C₂₋₆ alkyl, C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl.

86 (previously presented). A method of treatment as described in claim 85 in which R₄ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl.

87 (previously presented). A method of treatment as described in claim 85 in which R₄ is -CH₂OH or -CH₃.

88 (previously presented). A method of treatment as described in claim 85 in which R₅ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl.

89 (previously presented). A method of treatment as described in claim 85 in which R₅ is -CH₃, -C₂H₅, -CH₂OH or -C₂H₄OH.

90 (previously presented). A method of treatment as described in claim 85 in which R₇ is C₁₋₆ hydroxyalkyl or C₁₋₆-alkoxy-C₁₋₆-alkyl.

91 (previously presented). A method of treatment as described in claim 85 in which R₇ is -CH₂OH or C₁₋₆ alkoxymethyl.

92 (previously presented). A method of treatment as described in claim 85 in which R₇ is -CH₂OH.

93 (currently amended). A method as described in claim 85 wherein compounds of the formula III are compounds of the formula I wherein:

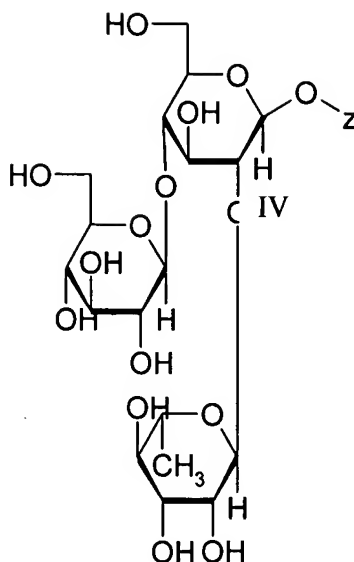
R₁ is rhamnose; .

R₂ is -OH; .

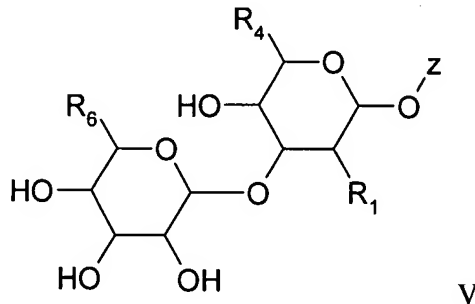
R₃ is glucose; and

R₄ R₄ is CH₂OH.

94 (previously presented). A method as described in claim 85 wherein compounds of the formula III are compounds of the formula IV



95 (currently amended). A method as described in claim 77 in which the compound of the formula I is a compound of the formula V:



wherein:

R_1 is OH, C_{1-6} alkoxy or NR_8R_9 , or a monosaccharide of the formula IIa;

R_4 is C_{1-6} alkyl, C_{1-6} hydroxyalkyl or C_{1-6} -alkoxy- C_{1-6} -alkyl;

R_5 is C_{1-6} alkyl, C_{1-6} hydroxyalkyl or C_{1-6} -alkoxy- C_{1-6} alkyl;

R_6 is C_{1-6} alkyl, C_{1-6} hydroxyalkyl or C_{1-6} -alkoxy- C_{1-6} -alkyl;

R_8 is H, C_{1-6} alkyl or C_{1-6} acyl;

R_9 is H, C_{1-6} alkyl or C_{1-6} acyl; and

Z is a steroid group.

96 (previously presented). A method as described in claim 95 in which R_1 is OH, or NR_8R_9 .

97 (previously presented). A method as described in claim 95 in which R_1 is NR_8R_9 ;

R_8 is H, C_{1-6} alkyl or C_{1-6} acyl; and

R_9 is H, C_{1-6} alkyl or C_{1-6} acyl.

98 (previously presented). A method as described in claim 95 in which R_1 is NR_8R_9 ;

R_8 is H; and

R_9 is H, C_{1-6} alkyl or C_{1-6} acyl.

99 (currently amended). A method as described in claim 95 in which R_1 is NR_8R_9 ;

R_8 is H; and

R_9 is C_{1-6} acyl.

100 (previously presented). A method as described in claim 95 in which R_1 is NR_8R_9 ;

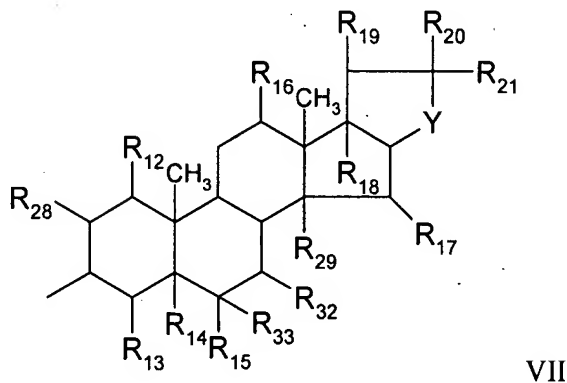
R_8 is H; and

R_9 is $-COCH_3$.

101 (previously presented). A method as described in claim 95 in which the

compound of formula IV is $\text{Gal}\beta 1\rightarrow 3(6\text{-deoxy})\text{GalNAc}\alpha\text{-Z}$.

102 (currently amended). A method according to claim 77 in which the steroid group is a group of the formula VII:



wherein:

R_{12} is H, -OH, C_{1-6} alkyl or C_{1-6} alkoxy;

R_{13} is H, -OH, =O, or C_{1-6} alkyl;

R_{14} is H, -OH or C_{1-6} alkyl or R_{14} and R_{33} taken together represent the second bond of a double bond joining adjacent carbon atoms;

R_{15} is H, or -OH, or R_{15} and R_{33} taken together are =O;

R_{16} is H, -OH or =O;

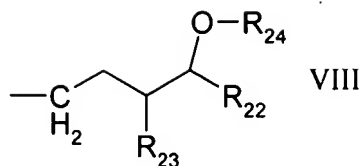
R_{17} is H, -OH or =O;

R_{18} is H, -OH, C_{1-6} alkoxy or C_{1-6} alkyl;

R_{19} is H, -OH, C_{1-6} alkyl or C_{1-6} alkoxy;

R_{20} is H, -OH, C_{1-6} alkoxy or C_{1-6} alkyl;

R_{21} is H, -OH, C_{1-6} alkyl, C_{1-6} alkoxy or is a group of the formula VIII:



R₂₂ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₂₃ is H, -OH, C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, C₁₋₆-alkoxy-C₁₋₆-alkyl, =CH₂ or =CH-C₁₋₆-alkyl;

R₂₄ is H, C₁₋₆ alkyl, C₁₋₆ acyl or a monosaccharide MS;

R₂₈ and R₂₉ are the same or different and are H or -OH;

R₃₂ is H, -OH or =O;

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or ~~R₃₃~~ R₃₃ and ~~R₁₄~~ R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms; MS is selected from a group consisting of rabinose, xylose, lyxose, ribose, glucose, mannose, galactose, allose, altrose, gulose, idose, talose, ribulose, xylulose, fructose, sorbose, tagatose, psicose, sedoheptulose, deoxyribose, fucose, rhamnose, 2-deoxy-glucose, quinovose, abequose, glucosamine, mannosamine, galactosamine, neuraminic acid, muramic acid, N-acetyl-glucosamine, N-acetyl-mannosamine, N-acetyl-galactosmine, N-acetylneuraminic acid, N-acetylmuramic acid, O-acetylneuraminic acid, N-glycolylneuraminic acid, fructuronic acid, tagaturonic acid, glucuronic acid, mannuronic acid, galacturonic acid, iduronic acid, sialic acid and guluronic acid; and

Y is N or O.

- 103 (previously presented). A method according to claim 102 in which Y is O.
- 104 (previously presented). A method according to claim 102 in which R₂₁ is a group of the formula VIII.
- 105 (previously presented). A method according to claim 104 in which R₂₄ is C₁₋₆ alkyl, C₁₋₆ acyl or a monosaccharide MS.
- 106 (previously presented). A method according to claim 104 in which R₂₄ is C₁₋₆ acyl or a monosaccharide MS.
- 107 (previously presented). A method according to claim 104 in which R₂₄ a monosaccharide MS.
- 108 (previously presented). A method according to claim 105 in which MS is selected from the group consisting of glucose, galactose, mannose, fucose, N-acetyl-glucosamine, N-acetyl-galactosamine and sialic acid.
- 109 (previously presented). A method according to claim 105 in which MS is glucose.
- 110 (previously presented). A method according to claim 104 in which R₂₃ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, C₁₋₆-alkoxy-C₁₋₆-alkyl, =CH₂ or =CH-C₁₋₆-alkyl.

111 (previously presented). A method according to claim 104 in which R_{23} is C_{1-6} alkyl, C_{1-6} hydroxyalkyl or $=CH_2$.

112 (previously presented). A method according to claim 104 in which R_{23} is $-C_2H_4OH$, $-CH_2OH$, C_{1-6} alkyl, or $=CH_2$.

113 (previously presented). A method according to claim 104 in which R_{23} is $-C_2H_4OH$, $-CH_2OH$, $-C_2H_5$, $-CH_3$ or $=CH_2$.

114 (previously presented). A method according to claim 104 in which R_{23} is $-CH_3$.

115 (previously presented). A method according to claim 104 in which R_{23} is $=CH_2$.

116 (previously presented). A method of claim 104 in which R_{22} is H, $-OH$, or C_{1-6} alkoxy.

117 (previously presented). A method of claim 104 in which R_{22} is H.

118 (previously presented). A method of claim 102 in which R_{19} is H, $-OH$, or C_{1-6} alkyl.

119 (currently amended). A method of Claim 102 in which:

R₁₂ is H, -OH;

R₁₃ is H or -OH;

R₁₄ is H, or -OH or R₁₄ and R₃₃ taken together represent the second bond of a double bond joining adjacent carbon atoms;

R₁₅ is H, or R₁₅ and R₃₃ taken together are =O;

R₁₈ is H, -OH or C₁₋₆ alkoxy;

R₁₉ is C₁₋₆ alkyl;

R₂₀ is H, -OH or C₁₋₆ alkoxy;

R₃₂ is H, -OH or =O; and

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms.

120 (previously presented). A method of claim 102 in which:

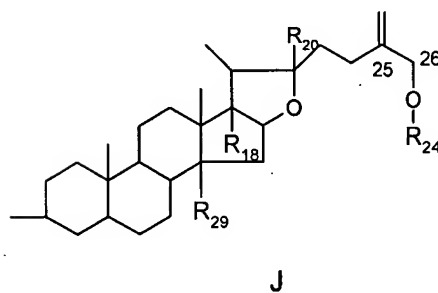
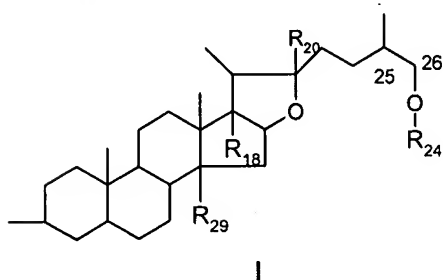
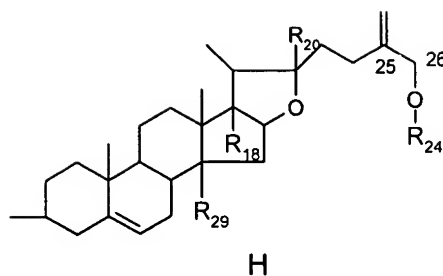
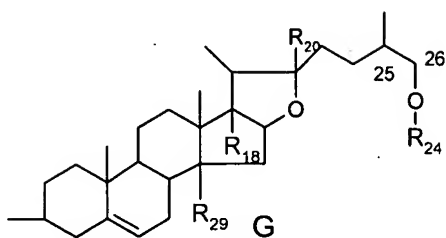
R₁₆ is H or =O;

R₁₇ is H or -OH;

R₁₈ is H or -OH; and

R₂₀ is -OH or C₁₋₆ alkoxy.

121 (previously presented). A method of claim 102 in which the steroid group is selected from a group consisting of:



wherein:

R_{18} is H or -OH;

R_{20} is -OH or C_{1-6} alkoxy;

R_{24} is glucose or C_{1-6} acyl; and

R_{29} is H or -OH.

122 (previously presented). A method of claim 77 in which the compound of the formula I is selected from the group consisting of

trigoneoside IVa which is (3 β ,25S)-26-(β -D-glucopyranosyloxy)-22-

hydroxyfurost-5-en-3-yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-

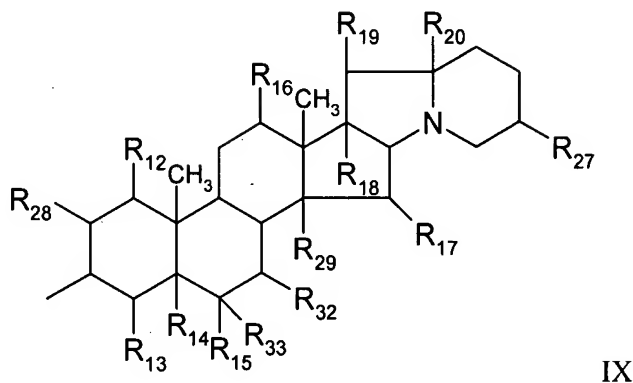
[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranoside, glycoside F which is (3 β)-26-(β -

D-glucopyranosyloxy)-22-hydroxyfurost-5-en-3-yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-

O-[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranoside, shatavarin I, compound 3,

pardarinoside C.

123 (previously presented). A method according to claim 77 in which the steroid group is a group of the formula VIII:



wherein:

R₁₂ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₁₃ is H, -OH, =O, or C₁₋₆ alkyl;

R₁₄ is H, -OH or C₁₋₆ alkyl or R₁₄ and R₃₃ taken together represent the second bond of a double bond joining adjacent carbon atoms;

R₁₅ is H, or -OH, or R₁₅ and R₃₃ taken together are =O;

R₁₆ is H, -OH or =O;

R₁₇ is H, -OH or =O;

R₁₈ is H, -OH, C₁₋₆ alkoxy or C₁₋₆ alkyl;

R₁₉ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₂₀ is H, -OH, C₁₋₆ alkoxy or C₁₋₆ alkyl;

R₂₇ is H, -OH, C₁₋₆ alkyl, C₁₋₆ alkoxy or C₁₋₆ hydroxyalkyl;

R₂₈ and R₂₉ are the same or different and are H or -OH;

R₃₂ is H, -OH or =O; and

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms.

124 (previously presented). A method of claim 123 in which R₂₇ is H, C₁₋₆ alkyl, or C₁₋₆ alkoxy.

125 (previously presented). A method of claim 123 in which R₂₇ is H, or C₁₋₆ alkyl.

126 (previously presented). A method of claim 123 in which R₁₉ is H, -OH, or C₁₋₆ alkyl.

127 (previously presented). A method of claim 123 in which R₂₀ is -OH or C₁₋₆ alkoxy.

128 (currently amended). A method of claim 123 in which

R₁₂ is H or -OH;

R₁₃ is H or -OH;

R₁₄ is H, or -OH or R₁₄ and R₃₃ taken together represent the second bond of a double bond joining adjacent carbon atoms;

R₁₅ is H, or R₁₅ and R₃₃ taken together are =O;

R₁₆ is H, -OH or =O;

R₁₇ is H, -OH or =O;

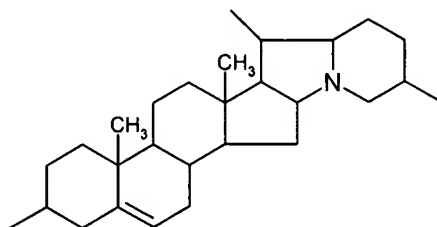
R₁₈ is H, -OH or C₁₋₆ alkoxy;

R₁₉ is C₁₋₆ alkyl;

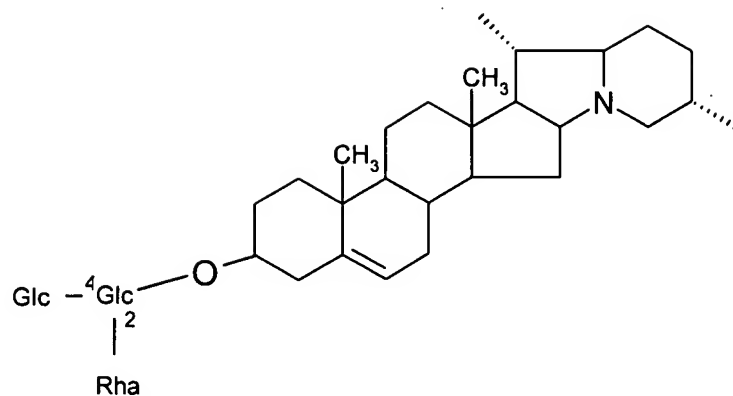
R₃₂ is H, -OH or =O; and

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms.

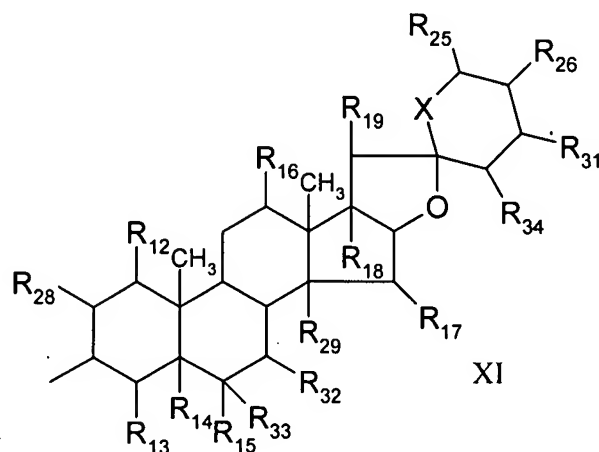
129 (previously presented). A method of claim 123 in which the compound of the steroid group is a compound of the formula IXa



130 (previously presented). A method of claim 123 in which the compound of the formula I is a compound of the formula:



131 (previously presented). A method of claim 77 in which the steroid group is of the formula XI:



wherein:

R₁₂ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₁₃ is H, -OH, =O, or C₁₋₆ alkyl;

R₁₄ is H, -OH or C₁₋₆ alkyl or R₁₄ and R₃₃ taken together represent the second bond of a double bond joining adjacent carbon atoms;

R₁₅ is H, or -OH, or R₁₅ and R₃₃ taken together are =O;

R₁₆ is H, -OH or =O;

R₁₇ is H, -OH or =O;

R₁₈ is H, -OH, C₁₋₆ alkoxy or C₁₋₆ alkyl;

R₁₉ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₂₅ is H, -OH, C₁₋₆ alkyl or C₁₋₆ alkoxy;

R₂₆ is H, -OH, C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, C₁₋₆-alkoxy-C₁₋₆-alkyl, =CH₂ or =CH-C₁₋₆-alkyl;

R₂₈ and R₂₉ are the same or different and are H or -OH;

R₃₁ is H or -OH;

R₃₂ is H, -OH or =O;

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms;

R₃₄ is H or -OH; and

X is O, S or NH.

132 (currently amended). A method of claim 131 in which X is O or NH₂.

133 (currently amended). A method of claim 131 in which X is O₁₂.

134 (previously presented). A method of claim 131 wherein R₂₆ is C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, C₁₋₆-alkoxy-C₁₋₆-alkyl, =CH₂ or =CH-C₁₋₆-alkyl.

135 (previously presented). A method of claim 131 wherein R₂₆ is C₁₋₆ alkyl, C₁₋₆

hydroxyalkyl or $=CH_2$.

136 (previously presented). A method of claim 131 wherein R_{26} is $-C_2H_4OH$, $-CH_2OH$, C_{1-6} alkyl, or $=CH_2$.

137 (previously presented). A method of claim 131 wherein R_{26} is $-C_2H_4OH$, $-CH_2OH$, $-C_2H_5$, $-CH_3$ or $=CH_2$.

138 (previously presented). A method of claim 131 wherein R_{26} is $-CH_3$ or $=CH_2$.

139 (previously presented). A method of claim 131 wherein R_{19} is H, $-OH$, C_{1-6} alkyl.

140 (previously presented). A method of claim 131 wherein R_{19} is C_{1-6} alkyl.

141 (previously presented). A method of claim 131 wherein:

R_{12} is H, or $-OH$;

R_{13} is H, or $-OH$;

R_{14} is H or R_{14} and R_{33} taken together represent the second bond of a double bond joining adjacent carbon atoms;

R_{15} is H, or R_{15} and R_{33} taken together are $=O$;

R_{18} is H or $-OH$;

R_{25} is H or $-OH$;

R₂₈ and R₂₉ are H;

R₃₁ is H or -OH;

R₃₃ is H, or R₃₃ and R₁₅ taken together are =O, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms; and

R₃₄ is H or -OH.

142 (previously presented). A method of claim 131 wherein:

R₁₅ is H;

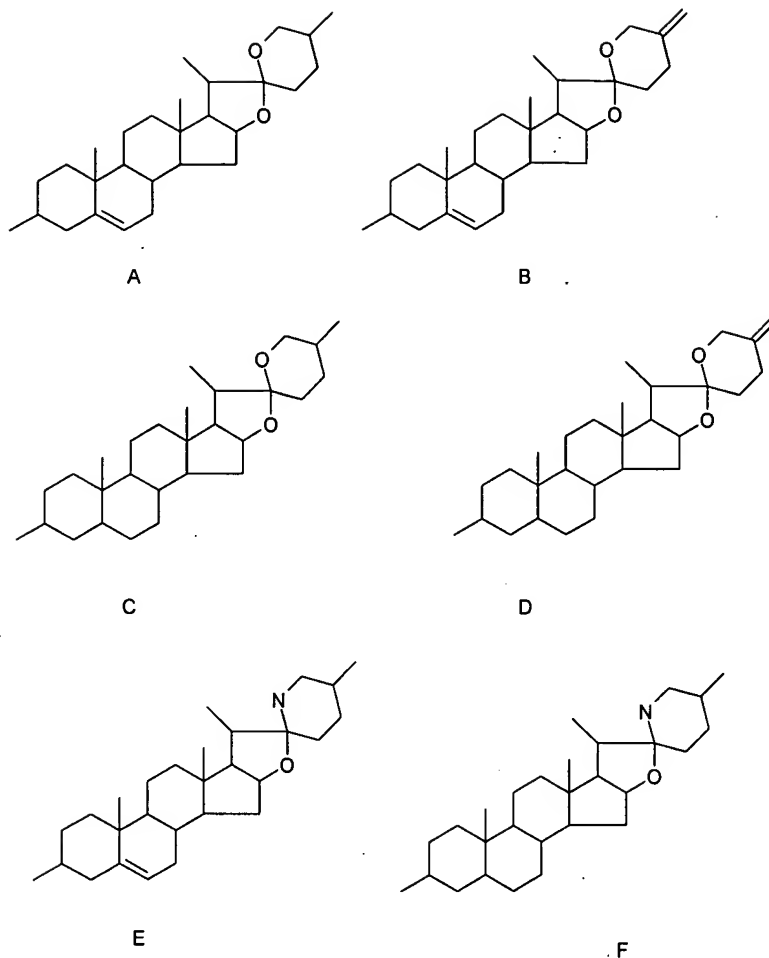
R₁₆ is H or -OH;

R₁₇ is H or -OH;

R₃₂ is H or -OH; and

R₃₃ is H, or R₃₃ and R₁₄ taken together represent the second bond of a double bond joining adjacent carbon atoms.

143 (previously presented). A method of claim 131 in which the steroid group of the formula XI is selected from the group consisting of:



144 (previously presented). A method of claim 131 in which the steroid group of the formula XI is selected from the group consisting of diosgenin, yamogenin, tigogenin, neotigogenin, sarsasapogenin, smilagenin, hecogenin, solasodine or tomatidine.

145 (previously presented). A method of claim 77 in which the compounds of the formula I are selected from the group consisting of: Shatavarin IV which is sarsasapogenin 3-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-

glucopyranoside,

Compound 12 which is solasodine 3-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranoside,

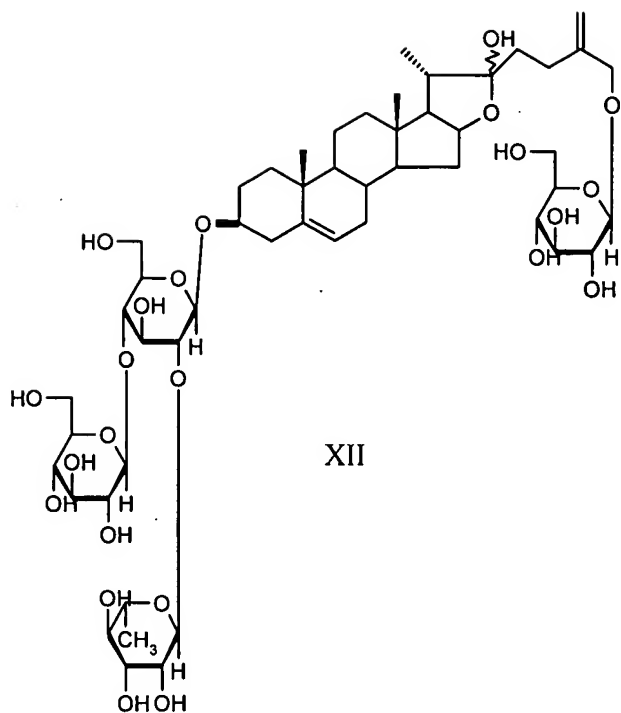
Deltonin which is (3 β ,25R)-spirost-5-en-3-yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-Glucopyranoside, and Balanitin VI is (3 β ,25S)-spirost-5-en-3-yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 4)]- β -D-Glucopyranoside.

146-150 (canceled).

151 (previously presented). A pharmaceutical composition comprising a compound disclosed in the method of claim 77.

152 (previously presented). A compound of the formula:

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Appl. No. 10/584,470
August 21, 2009



153 (canceled).